Names: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

# Measuring Wheels Task

MM2G3. Students will understand the properties of circles.

c. Use the properties of circles to solve problems involving the length of an arc and the area of a sector.

## Raw Data

|  |  |  |
| --- | --- | --- |
| What? | How big? | Computed arc length in degrees |
| 1. |  |  |
| 2. |  |  |
| 3. |  |  |

## Calculations

Your wheel has what diameter?

What's its circumference?

What distance will your wheel measure if it turns...

exactly 1 time?

½ times?

2 times?

Write a formula so you can calculate inches measured from number of degrees through which your wheel turns.

How are arc length and circumference related? (this is a description of the formula you just wrote)

## Presentation

Your poster must have the following:

* a short description of the task,
* a summary of your raw data,
* the formula you wrote,
* your answer to “How are arc length and circumference related?”,
* a title,
* a sketch of your measuring wheel